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WATER SUPPLY OUTLOOK FOR MONTANA



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
MONTANA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation
with Federal, State and private organizations listed inside the back cover of this report.

AS OF
APR. 1, 1974

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*Cover Photo: Snow Surveyors near Ship Creek,
Alaska snow course.*

SUR PHOTO A-272-11

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR MONTANA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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MAP, SNOW COURSES AND RELATED DATA MEASURING SITES

COOPERATORS Inside Back Cover



MONTANA WATER SUPPLY OUTLOOK
April 1, 1974

COLUMBIA RIVER DRAINAGE

Snow - Very heavy snowpack covers the mountain head waters area of the Bitterroot, Lower Clark Fork and Kootenai River drainage in Montana. Most snow courses in this area have record or near record water contents. A small area in the upper Clark Fork has near average snow pack with remaining area of the Clark Fork, the Blackfoot and Flathead areas showing above average snow. In general, the snowpack is heaviest along the Montana-Idaho border and decreases eastward to the Continental Divide.

Streamflow - Streams with headwaters along the divide between Montana and Idaho are forecasted to produce runoff near the record years of 1956 and 1972. Above average runoff is expected for all other streams with larger percentage flows in westerly areas decreasing toward the east.



MISSOURI RIVER DRAINAGE

Snow - The mountain snowpack varies from record or near record levels in southwest Montana to about average in central and northcentral areas. Snowfall during March was well above average in southern areas decreasing to average or a little less in other Missouri River drainages.

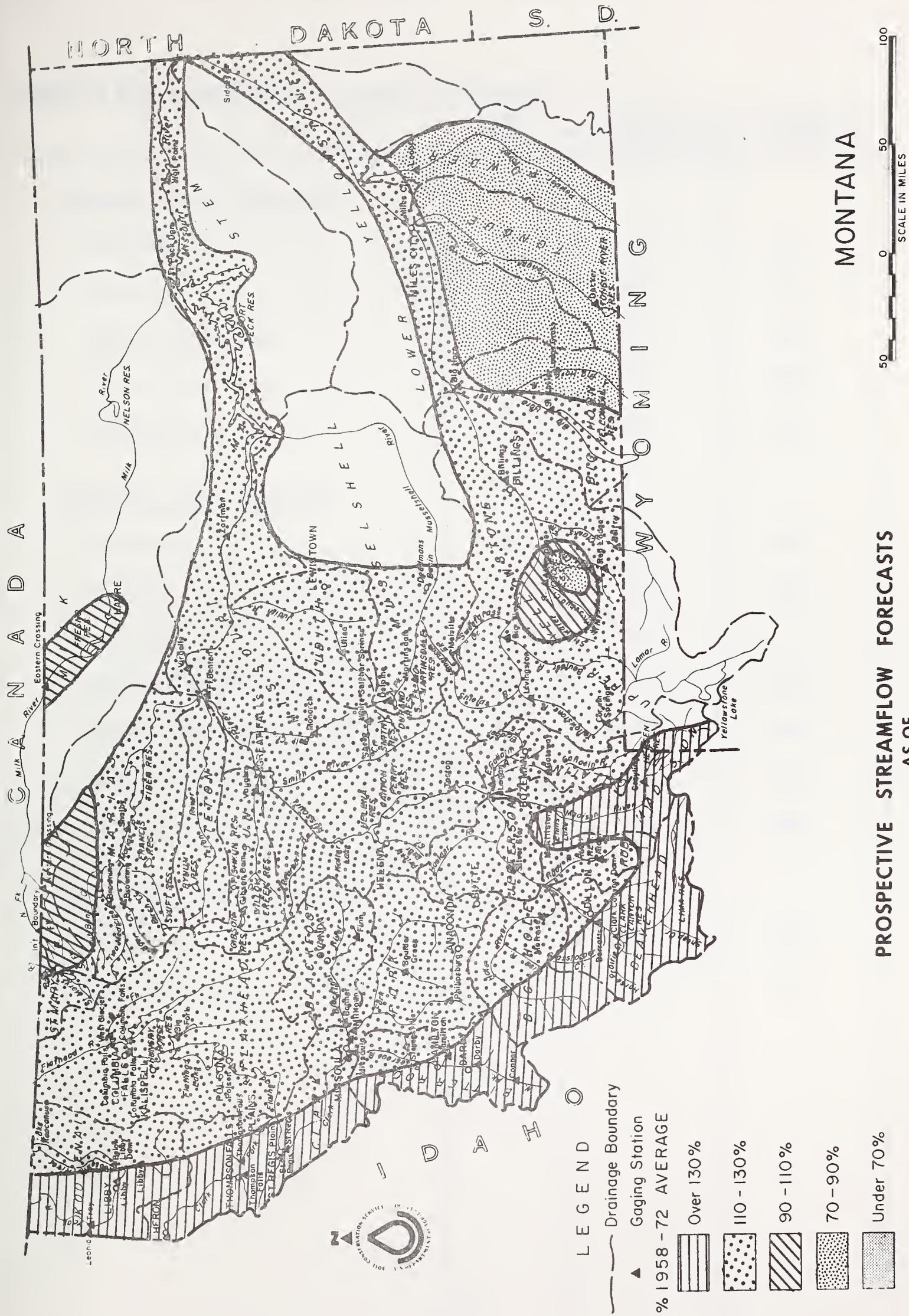
Streamflow - Near record runoffs are expected in the Madison River drainage with well above average streamflow from the headwaters of the Bighole and Beaverhead Rivers. Above average spring and summer streamflow volumes are predicted for all remaining Missouri River tributaries except for the Milk River drainage where near average flows are anticipated.

YELLOWSTONE RIVER DRAINAGE

Snow - Below average snow pack persists along the northeast side of the Beartooth Mountains eastward to the northern part of the Bighorn Mountains. Well above average amount of water is stored in the headwaters of the Yellowstone and upper reaches of the Boulder, Stillwater and Clarks Fork Rivers. The area between these two extremes has snow cover near to a little above average.

Streamflow - Above average runoff is forecast for most streams tributary to the Yellowstone River. Exceptions are the Stillwater River where near average flows are expected and Red Lodge Creek, Little Bighorn, Tongue and Powder Rivers where below average runoff is forecast. These below average areas are in drainages where heavy April snowfall is not uncommon and the situation in these areas could improve with increased storm activity in this area.

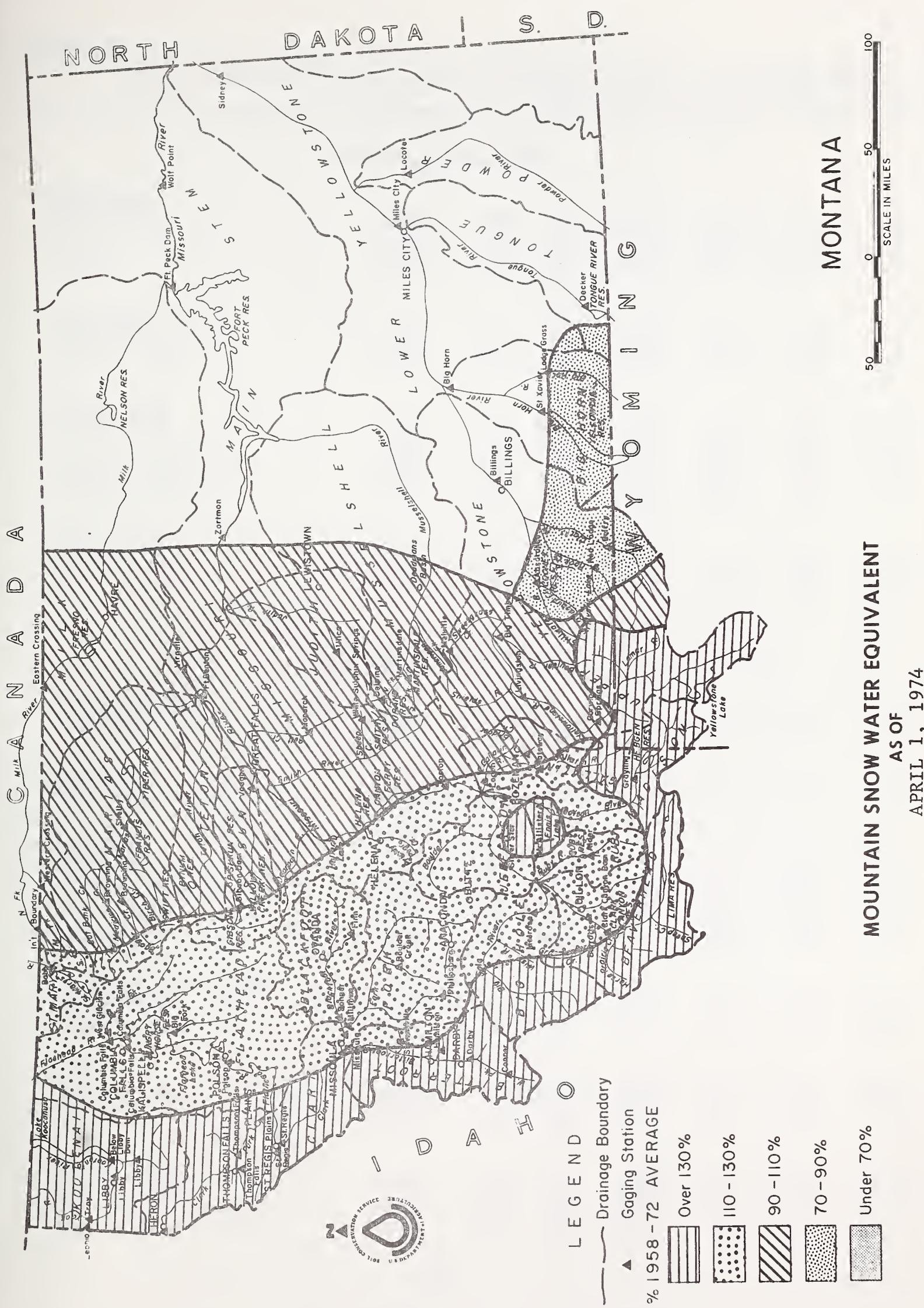






SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF:	
		Last Year	Average
<u>COLUMBIA RIVER DRAINAGE</u>			
Kootenai	27	187	139
Flathead	28	184	127
Upper Clark Fork	31	171	115
Lower Clark Fork	14	221	136
Bitterroot	15	194	136
<u>MISSOURI RIVER DRAINAGE</u>			
Jefferson	40	174	131
Madison	21	171	139
Gallatin	14	157	117
Missouri Main Stem	12	175	114
Judith-Musselshell	15	172	110
Marias-Teton-Sun	13	221	115
Milk (Headwaters)	2	185	109
<u>YELLOWSTONE RIVER DRAINAGE</u>			
Yellowstone	27	167	120
Little Big Horn	7	98	76



SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average +

COLUMBIA RIVER BASIN

Kootenai

Baree Trail	3800	48	7.5	4/2	6.6	5.7	6.4
Murphy Lake R. S.	3000	48	22.6	4/2	22.3	20.0	21.2
Raven	3050	48	23.0	4/2	17.2	14.0	19.7

Flathead

Desert Mountain	5600	54	8.4	3/29	8.8	6.9	7.6
Marias Pass	5250	54	6.5	3/27	7.2	5.9	5.7

Clark Fork

Black Pine	7100	48	10.0	3/26	8.2	7.4	7.4
Lubrecht Forest	4100	48	26.8	4/2	18.3	14.4	21.0
Seeley Lake R. S.	4030	48	11.9	4/1	11.3	7.5	9.9
Skalkaho Summit	7260	48	10.8	3/25	10.2	9.7	9.7

Bitterroot

Gibbons Pass	7100	48	7.1	3/28	5.6	2.8	4.9
Lolo Pass	5250	48	10.6	3/28	6.8	5.8	6.1

MISSOURI RIVER BASIN

Beaverhead

Lakeview	6700	48	15.3	3/29	16.4	15.6	9.3
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Madison

West Yellowstone	6700	48	6.5	4/1	3.4	2.6	2.8
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Gallatin

Bridger Bowl	7250	48	17.0	3/26	15.2	16.2	16.3
College Site No. 2	4856	54	17.7	3/29	20.1	19.0	16.8
Lick Creek	6860	48	18.8	3/27	14.6	16.5	17.2
Twenty-One Mile	7150	48	10.0	4/1	8.0	6.8	4.3

Missouri Main Stem

Kings Hill	7420	48	11.8	3/28	8.4	8.4	6.7
Stemple Pass	6350	48	5.9	4/2	5.6	3.5	4.3

Milk

Beaver Creek	3950	48	20.9	3/27	8.2	11.8	16.0
Rocky Boy	4700	36	10.1	3/27	9.7	6.1	7.4

Yellowstone

Battle Ridge	6020	48	17.6	3/26	13.8	12.2	13.8
Northeast Entrance	7350	48	9.4	4/2	5.8	-	6.3
PMC Dryland	3700	48	20.7	4/1	7.6	11.4	-

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average

COLUMBIA RIVER BASIN

Kootenai	Koocanusa	3,522.0	1,061.0	273.1	-
Flathead	Hungry Horse	3,428.0	1,883.0	2,029.0	2,157.0
	Flathead Lake	1,791.0	933.9	669.4	794.5
	Camas (4)	45.2	16.7	32.9	27.1
	Mission Valley (8)	100.3	43.5	33.5	38.1
Clark Fork	Georgetown Lake	31.0	17.8	22.9	23.8
	Lower Willow Creek	4.6	3.9	0.9	1.4
	Noxon Rapids	334.6	328.0	149.1	198.5
	Nevada Creek	12.6		4.5	7.6
Bitterroot	Como	34.9		-	15.8
	Painted Rocks	31.7	0	13.5	20.2

MISSOURI RIVER BASIN

Beaverhead	Clark Canyon	328.9	152.2	160.7	145.6
	Lima	84.0	54.6	48.9	33.8
Ruby	Ruby	38.8		29.7	30.6
Madison	Hebgen Lake	377.5	229.8	253.8	206.3
	Ennis Lake	41.0	37.8	24.9	36.3
Gallatin	Middle Creek	8.0	4.4	4.2	3.9
Missouri	Canyon Ferry	2,043.0	1,490.0	1,462.0	1,561.0
	Hauser & Helena	61.9	62.5	60.7	54.2
	Lake Helena	10.4	10.7	10.0	8.3
	Holter Lake	81.9	80.4	81.4	57.9
	Smith River	10.7	3.9	5.1	7.1
	Bair	7.0	3.4	4.5	5.4
	Martinsdale	23.1	9.0	10.2	7.8
	Deadman's Basin	72.2	40.8	61.8	49.5
	Fort Peck	19,410.0	15,610.0	16,190.0	13,310.0
Sun	Gibson	105.0	44.5	58.0	43.6
	Willow Creek	32.3	21.4	22.5	21.0
	Pishkun	32.0	3.6	17.0	17.2
Marias	Lower Two Medicine	16.6		-	-
	Four Horns	19.2		-	-
	Swift	30.0		17.3	19.7
	Lake Frances	112.0		94.1	79.3
	Tiber	1,347.0	545.2	494.3	598.9
Milk	Fresno	127.2	26.2	87.0	86.5
	Nelson	66.8	22.9	44.8	40.7
	Lake Sherburne	66.1	39.9	15.4	24.7
Yellowstone	Mystic Lake	20.8	7.0	3.4	4.7
	Tongue River	68.0	36.8	-	38.4
	Cooney	27.5	18.2	17.0	15.6
Bighorn	Bighorn Lake	1,356.0	848.6	893.4	796.2



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET
	Thousand Acre Feet	Percent of Average		Last Year

COLUMBIA RIVER BASIN

KOOTENAI RIVER

Libby (near) (2)	9000	121	Apr-Sept	5252	7456
Below Libby Dam	7850	122	Apr-July	4443	6417
	6150	123	Apr-June	3472	5011

FISHER RIVER

Libby (near)	360	126	Apr-Sept		286
	345	128	Apr-July		269

YAAK RIVER

Troy (near)	750	132	Apr-Sept		568
	730	134	Apr-July		544

KOOTENAI RIVER

Leonia (at)	11200	123	Apr-Sept	5936	9073
	9950	125	Apr-July	5115	7957
	8000	124	Apr-June	4220	6431

FLINT CREEK

Boulder Creek (below) (3)	77.0	108	Apr-Sept		71.6
	62.0	110	Apr-July		56.1

MIDDLE FORK ROCK CREEK

Philipsburg (near)	95.0	125	Apr-Sept		75.9
	87.0	127	Apr-July		68.6

NEVADA CREEK

Finn (near)	28.3	131	Apr-Sept		21.6
	26.5	132	Apr-July		20.1

BLACKFOOT RIVER

Bonner (near)	1200	116	Apr-Sept	420	1031
	1100	118	Apr-July	363	934
	970	119	Apr-June	319	814

CLARK FORK RIVER

Milltown (above) (4)	950	120	Apr-Sept	298	792
	840	122	Apr-July	254	690
	720	122	Apr-June	221	590

CLARK FORK RIVER

Missoula (above)	2150	118	Apr-Sept	718	1823
	1940	119	Apr-July	617	1624
	1690	120	Apr-June	540	1404

(2) Adjusted for storage in Lake Koocanusa.

(3) Sum Flint Creek at Maxville and Boulder Creek at Maxville.

(4) Difference in observed flow Clark Fork above Missoula and Blackfoot near Bonner.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET
	Thousand Acre Feet	Percent of Average		Last Year
WEST FORK BITTERROOT RIVER				
Conner (near) (5)	255	148	Apr-Sept	172
	235	151	Apr-July	156
BITTERROOT RIVER				
Darby (near)	800	137	Apr-Sept	301
	750	138	Apr-July	266
	650	136	Apr-June	239
SKALKAHO CREEK				
Hamilton (near)	69.0	122	Apr-Sept	56.6
	61.0	123	Apr-July	49.6
BURNT FORK CREEK				
Stevensville (near) (10)	45.5	129	Apr-Sept	35.3
	40.0	129	Apr-July	31.0
BITTERROOT RIVER				
Missoula (at) (6)	1960	128	Apr-Sept	1527
	1830	130	Apr-July	1412
	1600	129	Apr-June	1236
CLARK FORK RIVER				
Missoula (below)	4110	123	Apr-Sept	3350
	3770	124	Apr-July	3036
	3290	125	Apr-June	2640
ST. REGIS RIVER				
St. Regis (near)	475	146	Apr-Sept	325
	450	146	Apr-July	308
CLARK FORK RIVER				
St. Regis (at)	5750	128	Apr-Sept	4507
	5270	129	Apr-July	4087
	4550	128	Apr-June	3563
NORTH FORK FLATHEAD RIVER				
Columbia Falls (near)	2400	120	Apr-Sept	1991
	2200	121	Apr-July	1813
	1850	119	Apr-June	1551
MIDDLE FORK FLATHEAD RIVER				
West Glacier (near)	2150	112	Apr-Sept	1324
	2000	113	Apr-July	1222
	1680	111	Apr-June	1061
SOUTH FORK FLATHEAD RIVER				
Columbia Falls (near) (7)	2650	111	Apr-Sept	1450
	2500	112	Apr-July	1374
	2200	111	Apr-June	1248
				1984

(5) Adjusted for storage in Painted Rocks Reservoir.

(6) Difference in observed flow Clark Fork above and below Missoula.

(7) Adjusted for storage in Hungry Horse Reservoir

(10) Adjusted for diversion into Sunset Highline Canal.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD		
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average
FLATHEAD RIVER					
Columbia Falls (at) (7)	7400	115	Apr-Sept	4164	6421
	6900	116	Apr-July	3875	5942
	6000	116	Apr-June	3435	5151
SWAN RIVER					
Big Fork (near)	840	117	Apr-Sept	717	
	750	119	Apr-July	630	
FLATHEAD RIVER					
Polson (near) (8)	9100	119	Apr-Sept	4678	7648
	8450	119	Apr-July	4430	7082
	7200	118	Apr-June	3910	6113
CLARK FORK RIVER					
Plains (near) (8)	15700	125	Apr-Sept	6703	12601
	14420	125	Apr-July	6104	11523
	12300	124	Apr-June	5354	9934
THOMPSON RIVER					
Thompson Falls (near)	370	134	Apr-Sept	277	
	340	137	Apr-July	248	
PROSPECT CREEK					
Thompson Falls (at)	205	139	Apr-Sept	147	
	195	142	Apr-July	137	
CLARK FORK RIVER					
Whitehorse Rapids (at) (9)	17800	124	Apr-Sept	14336	
	16270	124	Apr-July	13086	
	13800	122	Apr-June	11325	

(7) Adjusted for storage in Hungry Horse Reservoir.
 (8) Adjusted for storage in Hungry Horse Reservoir and Flathead Lake.
 (9) Adjusted for storage in Hungry Horse, Flathead Lake and Noxon Rapids Reservoirs.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET
	Thousand Acre Feet	Percent of Average		Last Year

MISSOURI RIVER BASIN

BEAVERHEAD RIVER

Grant (near) (11) (12)	195	134	Apr-Sept	133	145
	180	142	Apr-July	114	127

RUBY RIVER

Alder (near)	114	121	Apr-Sept	93.9
	98	123	Apr-July	79.4

BIG HOLE RIVER

Melrose (near)	845	113	Apr-Sept	748
	810	117	Apr-July	694

BIRCH CREEK

Glen (near)	17.2	126	Apr-Sept	13.7
	14.5	126	Apr-July	11.5

JEFFERSON RIVER

Silver Star (at)	1140	118	Apr-Sept	970
	1020	118	Apr-July	865

WILLOW CREEK

Harrison (near)	27.7	147	Apr-Sept	18.9
	25.0	146	Apr-July	17.1

MADISON RIVER

Grayling (near) (13)	630	131	Apr-Sept	440	480
	510	136	Apr-July	335	374

MADISON RIVER

McAllister (near) (14)	1100	133	Apr-Sept	788	828
	900	138	Apr-July	609	652

GALLATIN RIVER

Gateway (near)	595	112	Apr-Sept	531
	515	114	Apr-July	451

(11) Adjusted for storage in Lima Reservoir.

(12) Adjusted for storage in Clark Canyon Reservoir.

(13) Adjusted for storage in Hebgen Lake.

(14) Adjusted for storage in Hebgen and Ennis Lakes.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST Thousand Acre Feet	Percent of Average	FORECAST PERIOD	THOUSAND ACRE FEET Last Year
HYALITE CREEK				
Bozeman (near) (15)	48.0	109	Apr-Sept	44.2
	42.0	110	Apr-July	38.2
GALLATIN RIVER				
Logan (at)	670	117	Apr-Sept	573
	580	119	Apr-July	487
MISSOURI RIVER				
Toston (at) (16)	3050	125	Apr-Sept	1804
	2670	127	Apr-July	1431
SHEEP CREEK				
White Sulphur Springs (near)	23.5	114	Apr-Sept	10.6
	20.5	114	Apr-July	8.4
SUN RIVER				
Gibson Dam (at) (17)	670	114	Apr-Sept	285
	620	115	Apr-July	258
BELT CREEK				
Monarch (near)	140	114	Apr-Sept	123
	130	115	Apr-July	113
MISSOURI RIVER				
Fort Benton (at) (18)	4500	122	Apr-Sept	3690
	3890	125	Apr-July	3123
TWO MEDICINE CREEK				
Browning (near) (19)	280	111	Apr-Sept	253
	270	112	Apr-July	240
BADGER CREEK				
Browning (near)	143	110	Apr-Sept	130
	125	111	Apr-July	113
MARIAS RIVER				
Shelby (near) (20)	640	114	Apr-Sept	559
	605	112	Apr-July	538

(15) Adjusted for storage in Middle Creek Reservoir.
 (16) Adjusted for storage in Hebgen and Ennis Lakes and Clark Canyon Reservoir.
 (17) Adjusted for storage in Gibson Reservoir and diversions.
 (18) Adjusted for storage in Canyon Ferry Reservoir.
 (19) Adjusted for storage in Two Medicine Reservoir and diversions into Two Medicine Canal.
 (20) Adjusted for storage in Two Medicine, Four Horns, Lake Frances and Swift Reservoirs.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET
	Thousand Acre Feet	Percent of Average		Last Year
MISSOURI RIVER				
Virgelle (at) (21)	5200	120	Apr-Sept	4342
	4600	123	Apr-July	3742
SOUTH FORK JUDITH RIVER				
Utica (near)	16.5	111	Apr-Sept	14.9
	15.5	113	Apr-July	13.7
MISSOURI RIVER				
Landusky (near) (21)	5600	118	Apr-Sept	4739
	4900	120	Apr-July	4068
NORTH FORK MUSSELSHELL RIVER				
Delpine (near)	7.5	121	Apr-Sept	6.2
	6.5	120	Apr-July	5.4
SOUTH FORK MUSSELSHELL RIVER				
Martinsdale (above)	57	114	Apr-Sept	50.1
	55	116	Apr-July	47.3
MISSOURI RIVER				
Fort Peck Dam (below) (22)	5500	120	Apr-Sept	4598
	4900	120	Apr-July	4069
MILK RIVER				
Eastern Crossing (at)	270	104	Apr-Sept	260
MISSOURI RIVER				
Wolf Point (near) (22)	5900	120	Apr-Sept	4898
	5300	122	Apr-July	4361
MISSOURI RIVER				
Williston, N.D. (near) (29)	14000	119	Apr-Sept	11778
	12600	121	Apr-July	10437

SASKATCHEWAN RIVER BASIN

ST. MARY RIVER

Babb (near) (30)	525	120	Apr-Sept	438
	460	124	Apr-July	471

(21) Adjusted for storage in Canyon Ferry and Tiber Reservoirs.
 (22) Adjusted for storage in Canyon Ferry, Tiber and Fort Peck Reservoirs.
 (29) Adjusted for storage in Canyon Ferry, Tiber, Fort Peck, Buffalo Bill, Boysen and Yellowtail Reservoirs. Sum Yellowstone River near Sidney and Missouri River near Culbertson.
 (30) Adjusted for storage in Lake Sherburne.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST Thousand Acre Feet	Percent of Average	FORECAST PERIOD	THOUSAND ACRE FEET Last Year

YELLOWSTONE RIVER BASIN

YELLOWSTONE RIVER					
Corwin Springs (at)	2490	125	Apr-Sept	1485	1996
	2100	126	Apr-July	1231	1662
YELLOWSTONE RIVER					
Livingston (near)	2950	127	Apr-Sept		2317
	2450	127	Apr-July		1926
BOULDER RIVER					
Big Timber (at)	450	119	Apr-Sept		379
	425	121	Apr-July		350
STILLWATER RIVER					
Absarokee (near) (25)	610	103	Apr-Sept		591
	520	105	Apr-July		494
CLARKS FORK RIVER					
Belfry (near)	720	119	Apr-Sept		607
	650	119	Apr-July		546
ROCK CREEK					
Red Lodge (near)	126	115	Apr-Sept	80.6	110
	98.0	117	Apr-July	55.3	84.0
YELLOWSTONE RIVER					
Billings (at)	5150	121	Apr-Sept	3588	4246
	4440	123	Apr-July	2994	3613
BIG HORN RIVER					
St. Xavier (near) (26)	2200	119	Apr-Sept	1912	1849
	2050	120	Apr-July	1567	1706
LITTLE BIG HORN RIVER					
Lodgegrass (near) (28)	112	77	Apr-Sept		146
	100	78	Apr-July		129
YELLOWSTONE RIVER					
Miles City (at) (27)	7500	118	Apr-Sept		6378
	6650	120	Apr-July		5555
YELLOWSTONE RIVER					
Sidney (near) (27)	7750	116	Apr-Sept		6665
	7000	119	Apr-July		5895

(25) Adjusted for storage in Mystic Lake.
 (26) Adjusted for storage in Buffalo Bill, Boysen, Bull Lake and Yellowtail Reservoirs.
 (27) Adjusted for storage in Buffalo Bill, Boysen and Yellowtail Reservoirs.
 (28) Sum Little Big Horn below Pass Creek and Lodgegrass Creek near Wyola.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	THIS YEAR		PAST RECORD	
			Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
AMEROSE	6480	3/25	50	16.4	11.4	13.8
ARCH FALLS	7350	3/27	44	14.4	11.2	14.0
avalanche	7100	4/01	68	26.7	18.1	25.3
BADGER PASS	6900	3/27	129	49.6	26.0	42.0
BALD EAGLE PEAK	5700	3/28	208	92.0	48.4	68.0
BALD RIDGE	7500	3/28	42	13.2	10.2	14.0
BANFIELD MOUNTAIN	5600	3/27	88	36.2	19.0	25.5
BANFIELD MOUNTAIN PILLOW	5600	3/27	SP	31.1	16.5	21.8
BAREE CREEK	5500	4/02	180	75.0	31.1	49.4
BAREE MIDWAY	4600	4/01	151	54.1	24.4	37.7
BAREE TRAIL	3800	4/02	40	15.4	0.0	9.6
BASSOO PEAK	5150	3/29	58	14.6	4.4	12.0
BATTLE RIDGE	6020	3/26	22	7.5	-	7.4
BEAR BASIN	8150	3/25	81	28.2	16.4	22.4
BEAR PAW SKI AREA	5200	3/27	50	8.4	1.4	6.3
BEAVER LAKE	5900	3/27	85	33.4	16.5	25.1
BEERY MEADOW	7000	3/25	55	11.1	5.0	8.3
BIG COULEE	5100	4/01	27	8.5	-	-
BIG CREEK	6750	3/27	140	59.1	37.5	49.7
BIG SNOWY	7150	4/01	62	24.4	16.5	19.9
BIG SPRINGS (ID)	6500	3/28	80	30.0	18.1	21.3
BLACK BEAR	7950	3/29	165	66.8	34.5	-
BLACK BEAR PILLOW	7950	3/29	SP	57.6	31.4	-
BLACK CANYON (ID)	7850	3/26	151	50.7	30.6	34.0
BLACK MOOSE (ID)	8120	3/26	145	60.5	36.2	39.8
BLACK PINE	7100	3/26	51	18.3	9.9	14.0
BLACK PINE PILLOW	7100	3/26	SP	16.3	10.6	14.2
BLOODY DICK	7600	3/28	55	17.8	8.6	14.0
BLUE LAKE	5900	3/27	89	36.0	17.6	28.2
BLUE LEDGE MINE (ID)	6700	3/30	64	23.3	14.1	17.2
POTS SOTS	8000	3/29	27	7.7	11.2	-
FOULDER MOUNTAIN	7950	3/25	15	27.8	12.6	19.5
FOR RIVER #1 (AL)	5100	3/26	44	10.9	6.9	8.9
FOXELDER CREEK	5100	3/27	59	9.3	2.8	-
BRANHAM LAKES	8850	3/30	114	44.5	23.0	31.6
BRIDGER BOWL	7250	3/26	86	32.0	17.0	30.8
BRIDGER BOWL PILLOW	7250	3/26	SP	31.7	18.3	29.6
BRISTOW CREEK	3900	3/27	44	17.6	8.0	13.4
BRUSH CREEK TIMBER	5000	3/27	59	13.0	7.0	10.9
BULL MOUNTAIN	6600	3/29	28	9.0	-	-
CARIN CREEK	5200	3/30	26	7.9	2.6	7.4
CALVERT CREEK	6450	4/02	51	16.1	7.6	10.6
CAMP CREEK (ID)	6800	3/28	54	10.9	8.7	10.4
CAMP MISERY	6400	3/28	168	71.1	42.4	49.6
CAMP SENIA	7890	3/29	22	4.6	9.7	7.2
CARROT BASIN	9000	4/03	156	57.9	32.8	38.1
CARROT BASIN PILLOW	9000	4/03	SP	40.6	-	28.6
CARTER CREEK	7400	4/02	25	6.8	8.4	6.4

SNOW

DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	THIS YEAR		PAST RECORD	
			Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
CEDAR GROVE	4100	3/28	49	19.6	5.7	12.7
CHATEAU LAWN #8 (AL)	5700	3/25	52	15.0	12.8	11.1
CHESSMAN RESERVOIR	6200	3/28	15	4.5	4.5	3.3
COLE CREEK	7850	4/01	47	15.2	-	-
COMBINATION	5600	3/26	28	9.3	4.5	8.1
COMBINATION PILLOW	5600	3/26	SP	7.9	5.0	-
COOKE STATION	8150	3/28	15	23.1	13.5	20.5
COPPER BOTTOM	5200	3/29	42	15.0	6.4	-
COPPER CAMP	6950	3/29	105	42.0	20.1	-
COPPER CREEK	5700	3/29	50	19.0	9.2	16.3
COPPER LAKE CREEK	6100	3/29	18	31.6	14.6	-
COPPER MOUNTAIN	7700	4/01	47	14.7	9.0	12.3
COTTUNWOOD CREEK	6400	3/28	29	9.6	-	-
COYOTE HILL	4200	3/28	56	13.4	3.2	10.5
CREVICE MOUNTAIN	8400	4/03	51	14.0	5.8	10.6
CRYSTAL LAKE	6100	4/01	42	15.8	12.6	14.5
DAISY PEAK	7600	4/01	46	12.8	9.2	11.6
DAVIS CREEK	5400	3/26	95	39.9	22.3	26.5
DEADMAN CREEK	6450	3/27	59	13.3	6.8	12.7
DEADMAN CREEK PILLOW	6450	3/27	SP	12.2	5.7	11.0
DESERT MOUNTAIN	5600	3/29	64	22.0	13.2	17.2
DEVILS SLIDE	8100	3/27	71	25.5	17.5	24.7
DIX HILL	6400	3/31	31	10.5	-	-
EAGLE CREEK	7000	3/29	53	17.9	8.8	14.9
EAST FORK R.S.	5400	4/01	24	8.1	3.8	6.7
EL DORADO MINE	7800	3/27	66	25.7	17.2	23.1
ELK HORN SPRINGS	7800	3/26	47	13.1	5.9	9.7
ELK PEAK	8000	3/26	59	19.2	10.4	19.2
FATTY CREEK	5500	3/27	84	32.1	17.5	24.8
FISHER CREEK	9100	3/28	145	56.0	28.6	38.5
FISHER CREEK PILLOW	9100	3/28	SP	50.0	26.1	35.0
FIVE-BULL	5700	3/27	22	7.9	3.6	7.5
FLEECER RIDGE	7500	3/29	48	15.0	-	-
FOUR MILE	6900	3/25	38	12.0	8.4	9.1
FRED BURR PASS	8000	3/27	76	25.3	17.9	28.2
FREIGHT CREEK	6000	3/27	52	20.4	8.0	16.8
FROHNER MEADOWS	6480	3/26	35	11.3	6.9	-
FROHNER MEADOWS PILLOW	6480	3/26	SP	10.5	7.4	-
GARVER CREEK	4250	3/26	47	16.9	10.3	12.8
GARVER CREEK PILLOW	4250	3/26	SP	16.4	-	10.4
GIBBONS PASS	7100	3/27	88	32.9	21.0	23.7
GOAT MOUNTAIN	7000	3/31	46	13.4	6.6	11.8
GOLD CREEK LAKE	7200	3/27	52	18.2	13.9	17.1
GOLD STONE	8100	3/28	67	22.4	10.4	17.9
GRASSHOPPER	7000	3/26	20	6.4	5.5	5.9
GRAVES CREEK	4300	3/25	71	26.9	13.1	19.4
GRIFFIN CREEK UTVIDE	5150	3/28	44	15.6	8.6	12.4
GRIZZLY PEAK	8400	4/01	44	13.7	17.8	17.5
GUNSLIGHT LAKE	6300	3/27	132	51.4	29.9	42.9
HAWKINS LAKE	6450	3/26	123	51.7	28.5	32.8



SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	Last Year
NAME	Elevation					Average
HAWKINS LAKE PILLOW	6450	3/26	SP	48.2	25.3	30.4
HEART LAKE TRAIL	4800	3/27	81	33.0	9.2	23.4
HERGEN DAM	6550	4/03	47	16.0	9.2	11.6
HELL ROARING DIVIDE	5770	3/28	116	48.6	26.4	34.0
HIGHWOOD DIVIDE	5650	4/01	31	10.0	-	-
HIGHWOOD STATION	4600	4/01	11	4.2	-	-
HOLBROOK	4550	3/31	42	13.2	3.7	10.5
HOOD MEADOW	6600	3/27	38	12.4	11.3	12.0
HOODOO BASIN	6000	3/27	164	73.6	35.4	53.8
HOODOO CREEK	5900	3/27	154	67.7	33.4	50.3
HUDSON BAY DIVIDE	5800	3/29	65	22.6	11.1	18.5
INDEPENDENCE	7850	4/01	73	25.8	12.6	19.1
INTERGAARD	6450	3/31	37	11.1	7.2	9.2
ISLAND PARK (ID)	6310	3/28	63	22.3	15.2	16.4
JACK CREEK	7500	3/26	25	7.4	7.2	6.1
JAHNKE LAKE TRAIL	7200	3/28	46	14.1	8.0	9.7
JOHNSON PARK	6450	4/01	21	6.0	4.6	7.2
KILGORE (ID)	6200	3/30	33	12.0	9.7	10.9
KING CREEK SADDLE	4550	4/01	0	0.0	0.0	-
KING SPRINGS	4150	4/01	0	0.0	0.0	-
KINGS HILL	7500	4/01	58	19.6	8.5	15.2
KISHENEHN	3890	4/02	51	10.5	4.6	8.4
KIT CARSON (ID)	5020	3/25	41	14.8	5.4	9.1
KIWANIS CAMP	3720	3/27	1	0.1	0.0	-
LAKE CAMP (WY)	7850	3/31	49	12.7	7.2	9.9
LAKE CREEK	6100	3/27	51	7.8	7.2	7.5
LAKEVIEW CANYON	6950	3/29	50	16.8	9.4	13.6
LAKEVIEW RIDGE	7400	3/29	46	15.2	8.4	11.6
LATHAM SPRINGS (ID)	7650	3/26	128	50.9	31.4	32.6
LEMHI PASS	7480	3/27	33	10.4	7.0	9.2
LEMHI RIDGE	8100	3/27	44	13.8	8.2	10.4
LICK CREEK	6860	3/27	55	10.5	10.7	10.6
LICK CREEK PILLOW	6860	3/27	SP	8.4	9.1	10.6
LITTLE PARK	7400	3/25	63	20.4	10.8	17.0
LOGAN CREEK	4300	3/27	50	9.9	3.8	8.0
LOLO PASS (ID)	5230	3/27	97	41.2	20.2	32.8
LOOKOUT (ID)	5250	3/27	122	47.1	20.8	36.7
LOST HORSE	5940	3/29	121	48.8	23.6	33.7
LOST SOUL	4800	3/27	62	24.5	12.1	17.2
LOWER TWIN	7900	3/25	81	29.4	17.6	22.5
LUBRECHT FLUME	4800	4/01	25	8.8	1.8	5.1
LUBRECHT FLUME PILLOW	4800	4/01	SP	8.0	1.8	5.7
LUBRECHT FOREST # 3	5450	4/02	27	9.2	4.6	7.4
LUBRECHT FOREST # 4	4650	4/02	12	4.1	.5	2.3
LUBRECHT FOREST # 6	4040	4/02	13	4.6	0.0	2.8
LUBRECHT HYDROPLOT	4200	4/01	21	7.8	0.0	3.2
LUPINE CREEK (WY)	7300	3/31	49	17.0	8.1	10.3
MADISON PLATEAU	7750	3/29	96	35.6	19.2	22.5
MADISON PLATEAU PILLOW	7750	3/29	SP	36.0	19.5	23.2
MARIAS PASS	5250	3/28	56	19.1	11.4	19.6



SNOW

DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	THIS YEAR		PAST RECORD	
			Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
MAYNARD CREEK	6210	3/26	62	19.1	14.8	19.4
MAYNARD CREEK PILLOW	6210	3/26	SP	11.6	8.0	12.7
MIDDLE FORK	7300	3/25	59	18.8	-	-
MIDDLE MILL CREEK	7850	3/30	69	24.8	13.3	16.6
MILL CREEK	7500	3/29	40	12.7	9.9	14.3
MINERAL CREEK	4000	3/30	72	23.0	11.9	20.0
MIRROR LAKE #6 (AL)	6600	3/25	49	16.5	11.0	12.5
MISSION MOUNTAIN	5050	4/01	0	.0	.0	-
MONUMENT PEAK	8800	4/01	106	36.2	18.6	27.8
MOOSE CREEK (ID)	6200	3/28	63	21.8	12.7	16.9
MOUNT LOCKHART	6400	4/01	79	29.4	11.8	25.0
MOUNT LOCKHART PILLOW	6400	4/01	SP	26.8	13.8	22.5
MT. EISENHOWER #10 (AL)	5000	3/27	28	7.2	4.7	5.5
MUDD LAKE	7650	4/02	80	28.2	14.0	23.0
NEW WORLD	6900	3/26	50	16.8	11.2	16.3
NEZ PERCE CAMP	5580	3/25	62	23.6	9.4	15.3
NEZ PERCE CREEK	6500	4/01	28	9.0	5.6	6.8
NEZ PERCE PASS	6570	3/25	66	25.4	11.8	17.3
NOISY BASIN	6040	3/28	154	62.3	-	-
NOISY CREEK	3600	3/28	12	3.9	.0	-
NORRIS BASIN (WY)	7500	4/02	46	14.3	8.3	11.0
NORTH FK. ELK CREEK	6250	4/01	42	15.0	8.7	12.7
NORTH FK. ELK CREEK PILL	6250	4/01	SP	15.3	8.5	13.1
NORTH FORK JUCKO	6330	3/28	127	52.2	32.3	49.6
NORTH MEADOW	7500	3/25	44	12.8	8.2	9.2
NORTHEAST ENTRANCE	7400	4/02	39	11.4	4.8	9.5
NORTHEAST ENTRANCE PILL.	7400	4/02	SP	10.8	6.6	9.3
PALISADE CREEK	8250	4/02	115	44.1	22.3	31.4
PETERSON MEADOWS	7200	3/26	59	11.2	7.9	-
PETERSON MEADOWS PILLOW	7200	3/26	SP	11.3	9.2	-
PICNIC GROUNDS	6200	4/01	18	6.3	3.3	4.6
PIPESTONE PASS	7200	4/01	20	6.5	4.2	6.2
PIPESTONE UPPER #2 (AL)	5300	3/26	58	7.6	5.9	8.9
POORMAN CREEK	5100	3/28	122	52.8	24.5	38.0
POORMAN CREEK PILLOW	5100	3/28	SP	50.1	21.4	32.1
PORCUPINE R.S.	6500	3/28	22	7.2	7.2	8.1
POTOMAGETON PARK	7150	3/27	56	19.9	11.2	15.3
RED LION	7100	3/27	55	16.0	10.9	17.6
RED MOUNTAIN	6000	3/29	80	30.1	16.0	20.1
ROCK CREEK	5600	4/01	23	8.4	8.2	10.2
ROCKER PEAK	8000	3/25	56	16.8	10.8	16.7
ROCKER PEAK PILLOW	8000	3/25	SP	16.6	11.4	16.7
ROCKY BOY	4700	3/27	19	5.8	.0	4.7
ROCKY BOY PILLOW	4700	3/27	SP	9.2	.6	5.1
SACAJAWEA	6550	3/26	48	14.9	11.0	15.3
SADDLE MOUNTAIN	7940	3/28	93	35.4	19.6	26.4
SADDLE MOUNTAIN PILLOW	7940	3/28	SP	37.0	21.1	28.2
SAWTELL MOUNTAIN (ID)	8710	3/28	154	48.0	29.3	35.3
SENTINEL CREEK	8300	3/27	87	31.2	20.0	24.6
SHOWER FALLS	8100	3/27	82	31.2	21.3	29.4



SNOW

DRAINAGE BASIN and/or SNOW COURSE	Elevation	THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
					Last Year	Average
SHOWER FALLS PILLOW	8100	3/27	SP	26.5	18.8	26.3
SKALKAHO SUMMIT	7260	3/25	87	31.9	18.5	27.4
SLIDE ROCK MOUNTAIN	7100	3/26	63	22.6	12.0	18.0
SMUGGLER MINE	6960	3/30	47	14.8	8.1	11.1
SOUTH FORK SHIELDS	8100	3/28	80	29.4	17.6	26.1
SPOTTED BEAR MOUNTAIN	7000	3/27	55	22.2	10.8	15.6
SPUR PARK	8000	3/27	68	25.4	12.4	23.6
SPUR PARK PILLOW	8100	3/27	SP	25.4	13.7	23.5
STAHL PEAK	6050	3/25	142	58.4	37.2	41.4
STEMPLE PASS	6600	3/28	44	12.4	6.8	11.4
STORM LAKE	7780	3/26	44	14.0	10.4	15.0
STUART MILL	6500	3/31	25	8.9	6.0	7.5
STUART MOUNTAIN	7400	3/28	103	42.6	23.9	34.2
SUCKER CREEK	5960	3/27	1	.1	.0	-
SUGARLOAF	7350	3/28	57	11.7	-	-
SYLVAN PASS (WY)	7100	3/30	57	17.7	10.5	13.8
TARGHEE PASS (ID)	7000	3/28	58	18.0	10.5	16.2
TAYLOR ROAD	4080	3/27	1	.1	.0	-
TEN MILE LOWER	6600	3/29	32	9.4	7.0	7.8
TEN MILE MIDDLE	6800	3/29	47	14.2	10.6	12.6
TEN MILE UPPER	8000	3/29	54	17.4	10.9	15.0
TEPEE CREEK	8000	3/27	64	20.4	12.2	16.4
TEPEE CREEK PILLOW	8000	3/27	SP	16.9	10.6	-
THUMB DIVIDE (WY)	7900	3/27	83	28.4	15.1	22.2
TIMBERLINE CREEK	8850	3/29	54	14.9	15.3	16.1
TRAIL CREEK	7090	3/27	33	10.6	6.4	9.0
TRINKUS LAKE	6100	3/27	157	56.0	39.6	46.5
TV MOUNTAIN	6800	3/29	70	24.6	14.0	20.3
TWELVEMILE CREEK	5600	3/29	88	34.4	14.3	21.1
TWELVEMILE CREEK PILLOW	5600	3/29	SP	29.4	12.7	18.6
TWENTY-ONE MILE	7150	4/03	80	28.4	12.2	17.9
TWIN CREEKS	3580	3/27	48	19.9	.0	11.7
TWIN LAKES	6510	3/29	141	59.0	28.8	43.7
TWIN LAKES PILLOW	6400	3/29	SP	56.8	28.6	42.7
UPPER HOLLAND LAKE	6200	3/27	108	44.9	25.6	38.3
VALLEY VIEW (ID)	6500	3/28	55	19.7	10.8	17.7
WALDRON	5600	4/01	36	13.0	3.5	12.2
WALDRON PILLOW	5600	4/01	SP	11.9	7.1	12.1
WEASEL DIVIDE	5450	3/25	123	50.6	29.3	36.4
WEST ROSEBUD	7500	3/28	54	8.4	8.8	12.4
WEST YELLOWSTONE	6700	4/03	53	19.2	10.2	11.4
WEST YELLOWSTONE PILLOW	6700	4/01	SP	13.7	7.5	8.8
WHISKEY CREEK	6800	3/29	84	31.2	16.5	22.1
WHITE ELEPHANT (ID)	7700	3/28	118	42.2	21.0	-
WHITE MILL	8700	3/28	108	39.2	19.5	27.7
WHITE MILL PILLOW	8700	3/28	SP	32.9	-	-
WHITE PINE RIDGE	8850				6.8	5.7
WILLOW CREEK	6500	4/01	24	8.1	-	-
WOLVERINE (WY)	7650	3/31	49	14.2	8.9	-
WRONG CREEK	5700	3/29	51	16.9	6.4	16.2

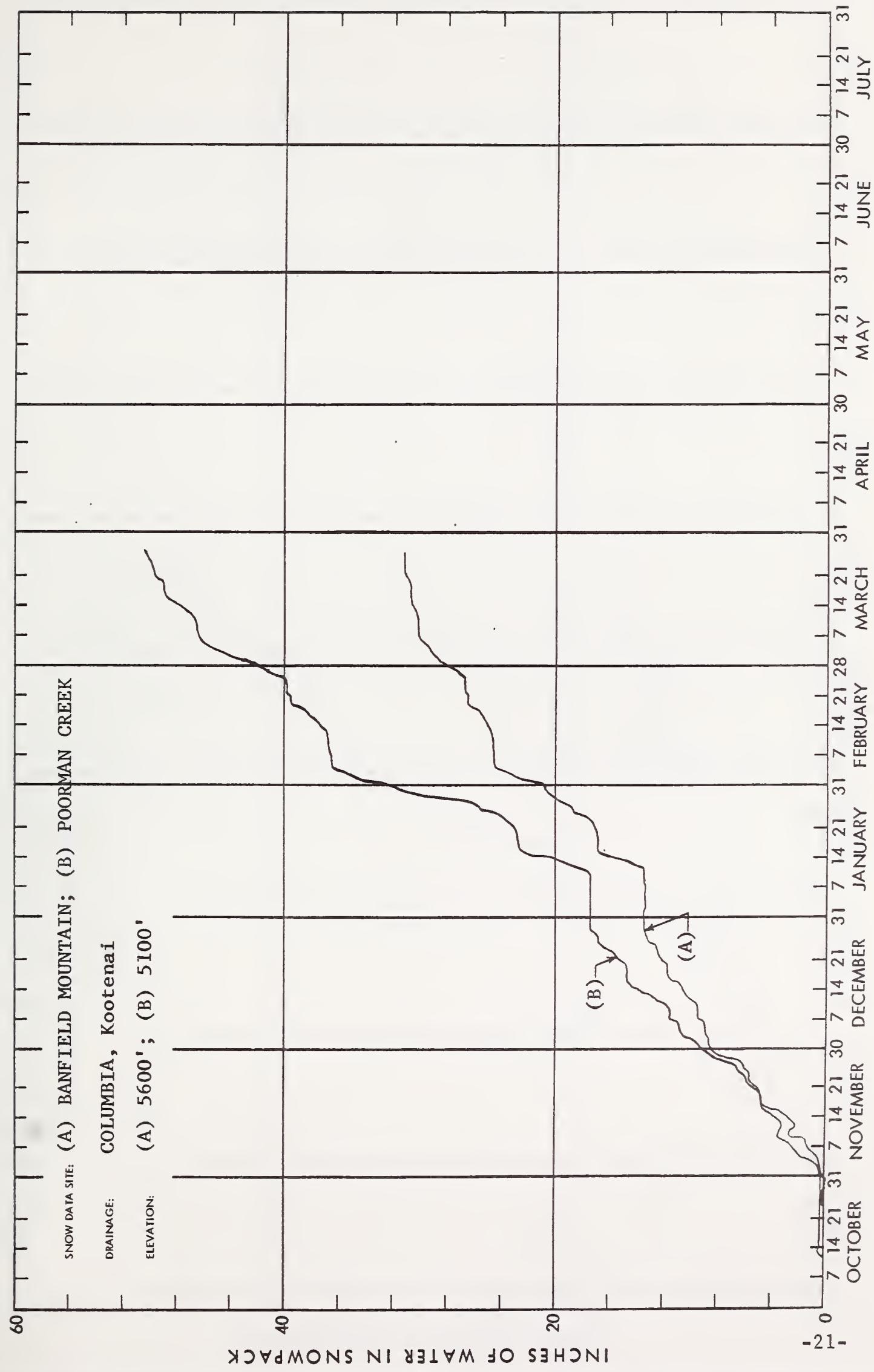
SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					
WRONG RIDGE	6800	5/28	68	24.4	10.0	22.0

LATE ARRIVING DATA

ABUNDANCE LAKE	8800	4/7	83	31.8	16.5	20.9
CALL ROAD	8050	4/7	55	17.8	10.7	12.2
CLOVER MEADOW	8600	4/7	67	25.0	15.9	18.7
DAD CREEK LAKE	8400	4/7	58	19.6	12.1	15.3
DARK HORSE LAKE	8600	4/7	97	39.7	20.4	28.0
DIVIDE	7800	4/7	51	16.6	9.8	11.6
EAST BOULDER S	9250	4/5	115	41.5A	24.0	-
FOOLHEN	8280	4/7	71	26.0	12.3	18.2
NOTCH	8500	4/7	64	23.8	13.9	16.3
OPHIR PARK	7150	3/31	58	20.8	-	-
PICKET PIN D	9450	4/5	87	30.5A	22.5	-
PICKET PIN LOWER	6200	4/2	0	0.0	4.6	-
PICKET PIN MIDDLE	7250	4/2	31	12.2	12.1	-
PICKET PIN UPPER	8100	4/2	69	23.3	18.9	-
PLACER BASIN F	8800	4/5	68	23.0A	18.0	-
SLAG-A-MELT LAKE	8750	4/7	101	41.3	20.8	27.8
STAR LAKE E	8600	4/5	161	64.5A	32.0	-
WHITE PINE RIDGE	8850	4/7	26	6.7	6.8	5.7







SNOW DATA SITE: (A) HAWKINS LAKE; (B) GARVER CREEK

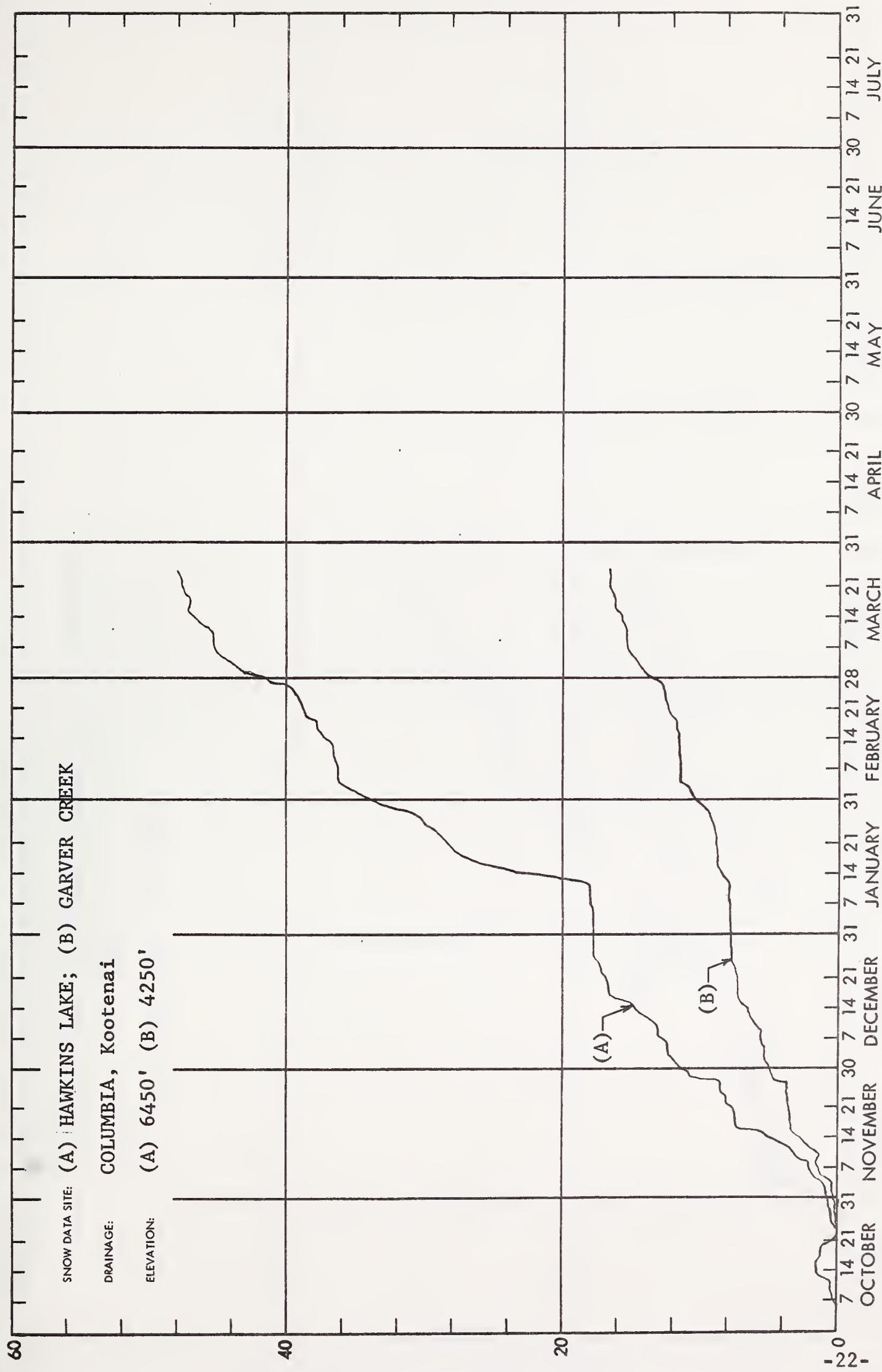
DRAINAGE: COLUMBIA: Kootenai

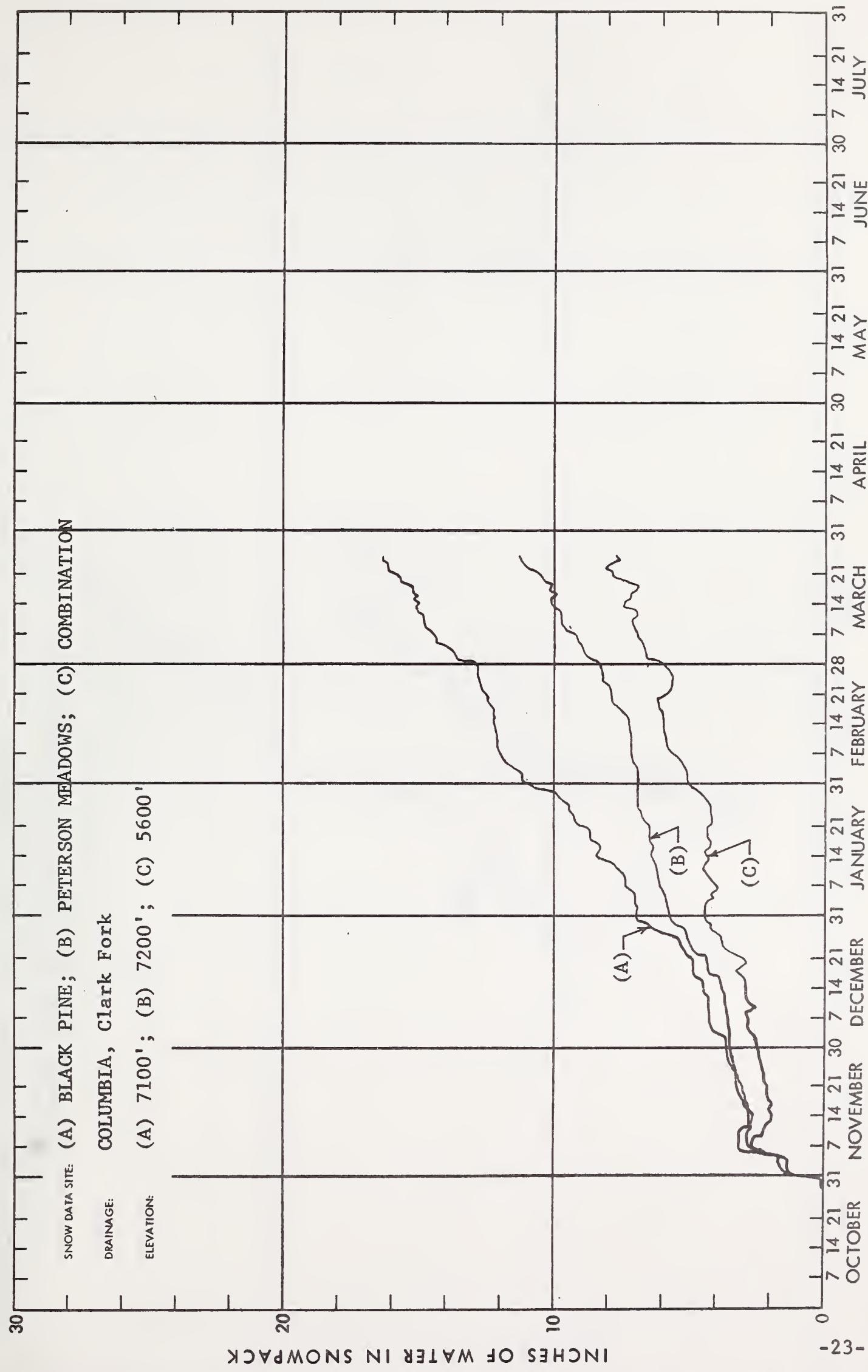
DRAINAGE: COLUMBIA: Kootenai

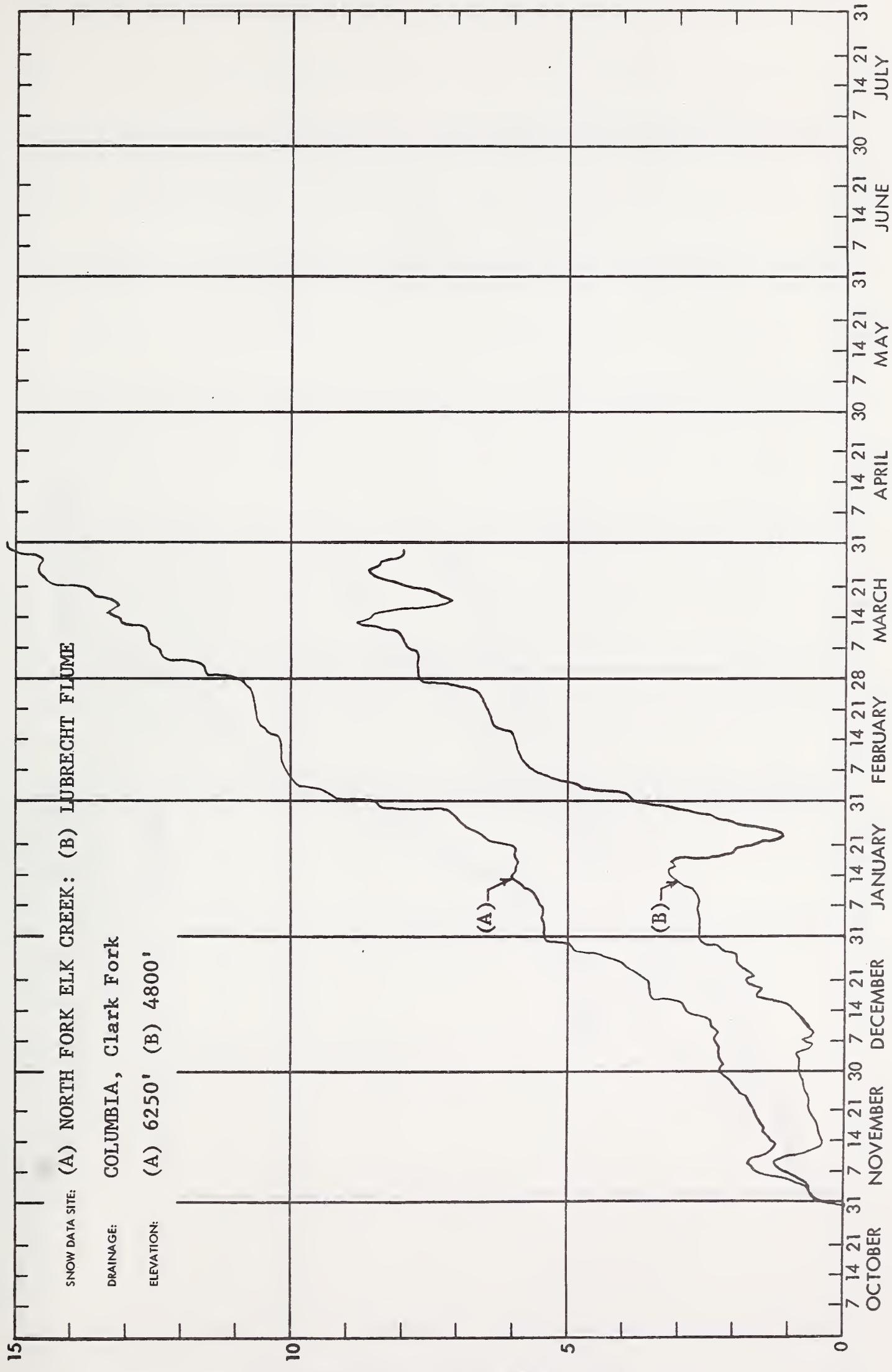
EL E V A T I O N : (A) 6450' (B) 4250'

ELEVATION:

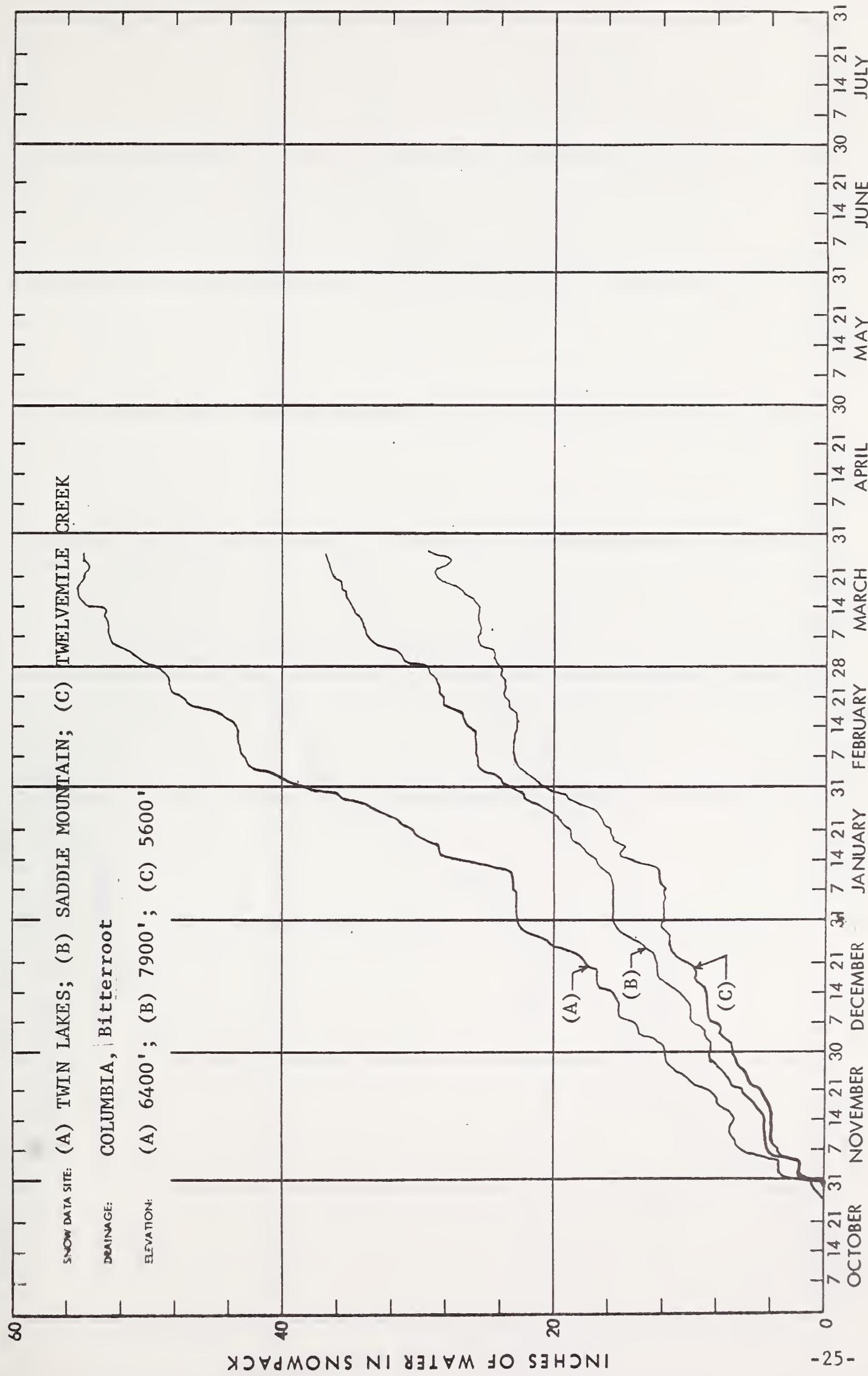
INCHES OF WATER IN SNOWPACK



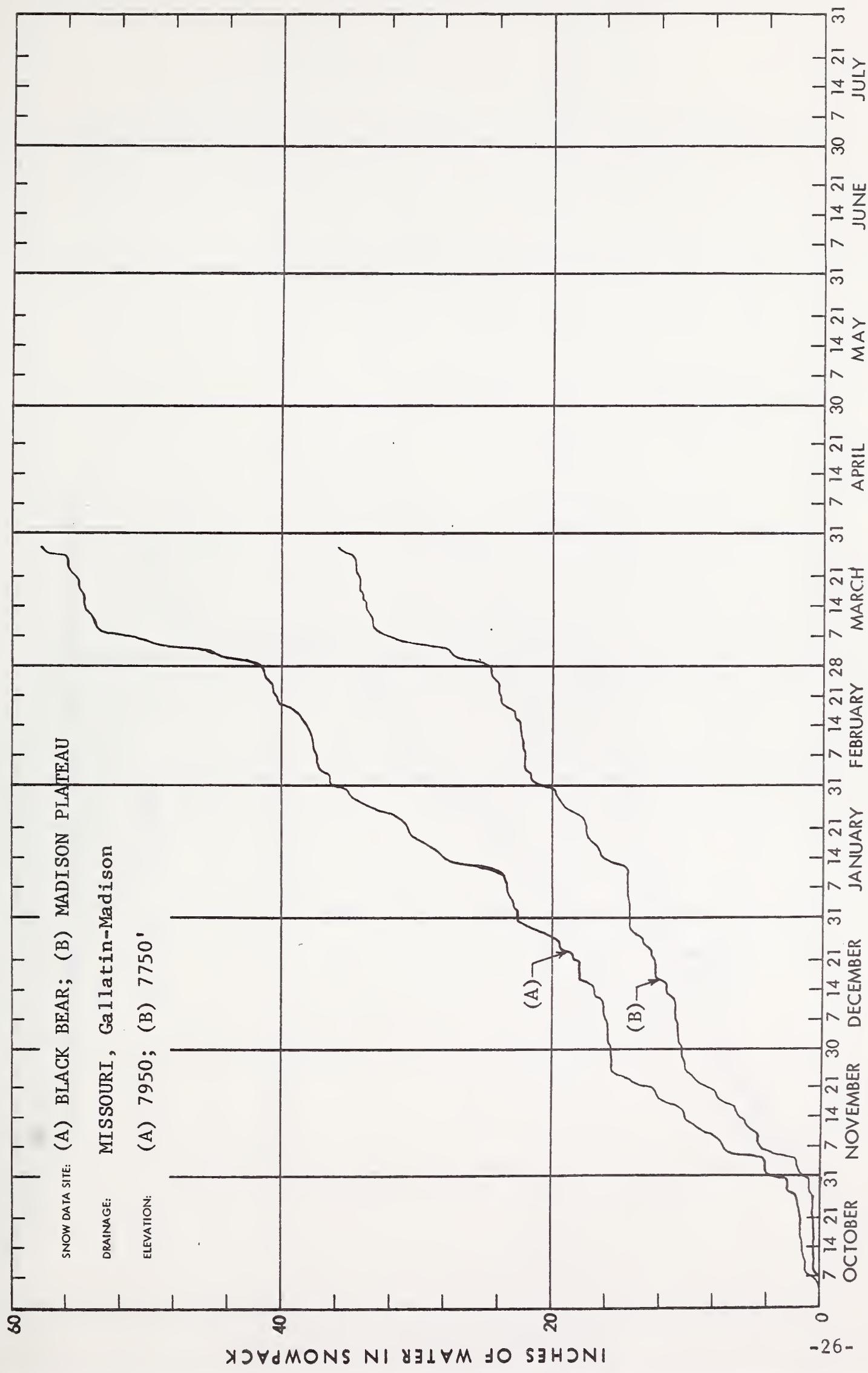




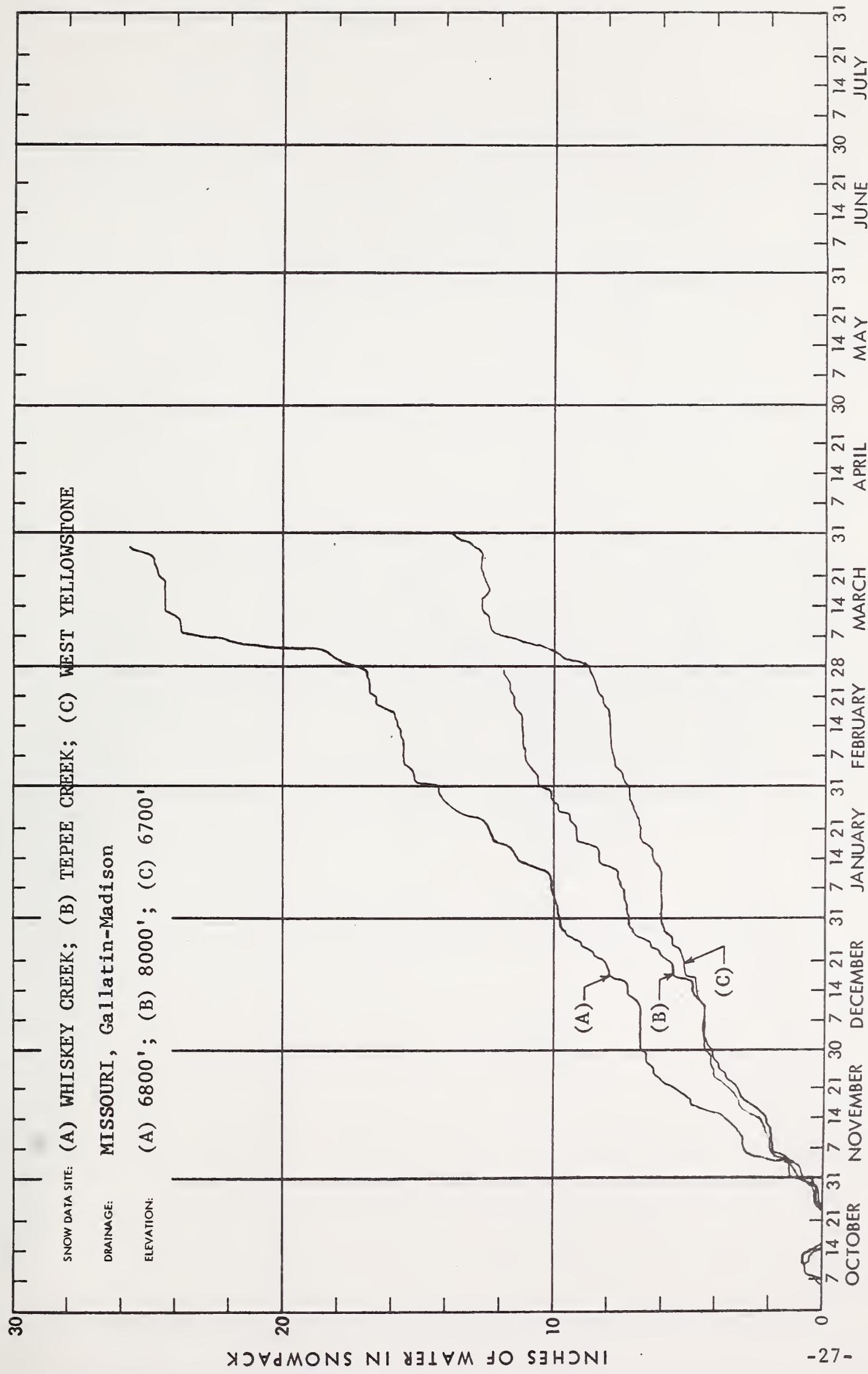




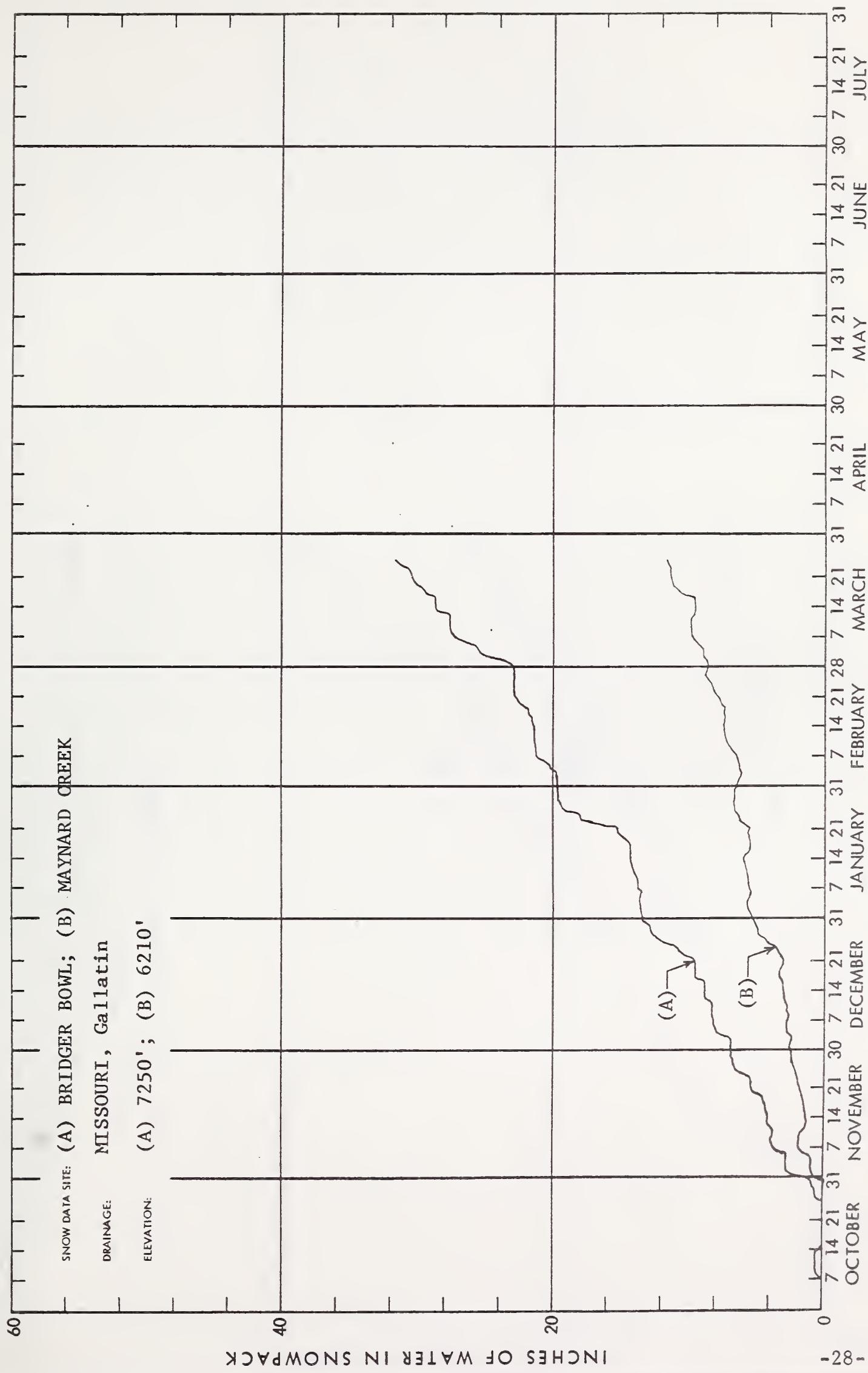




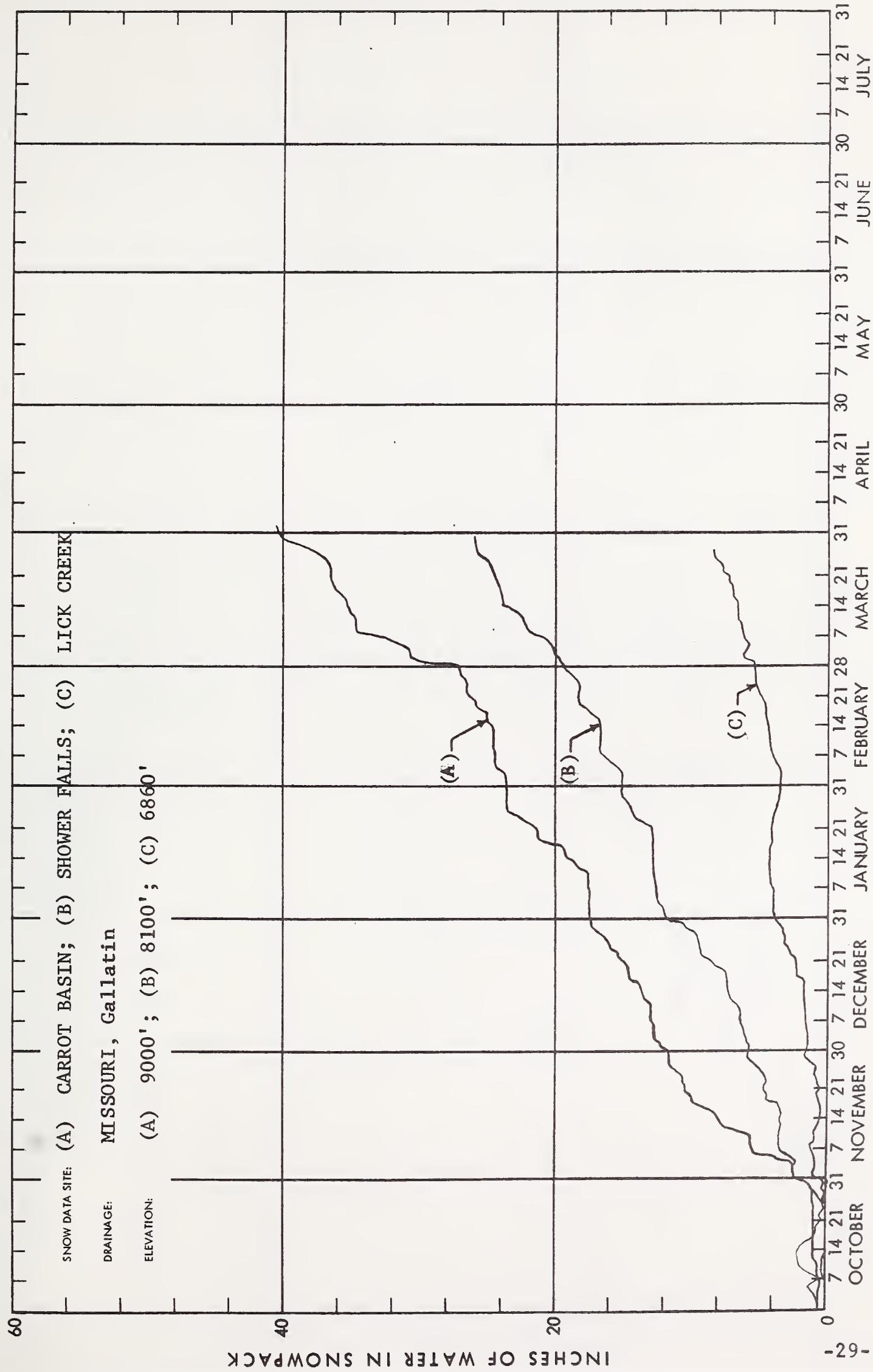


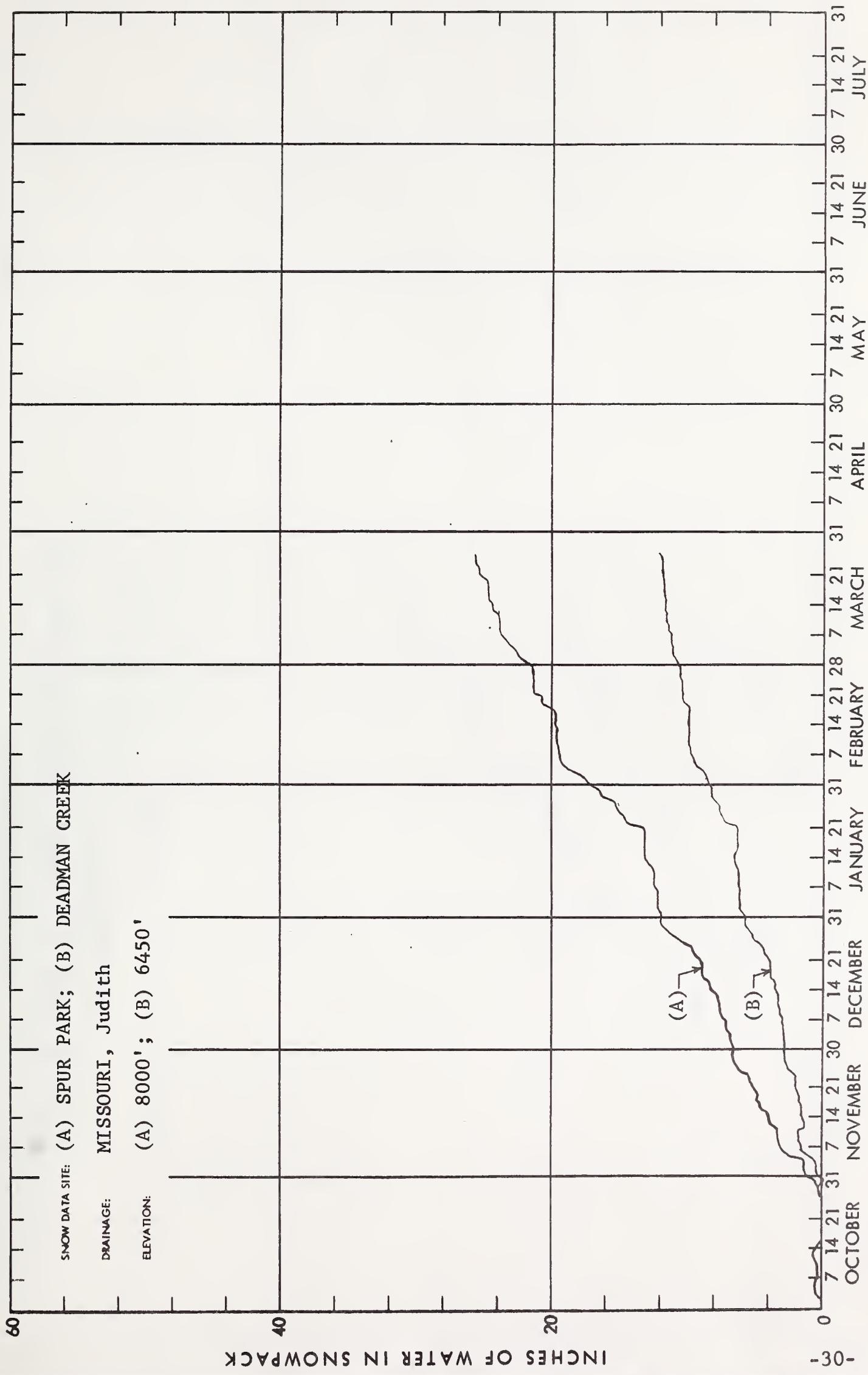


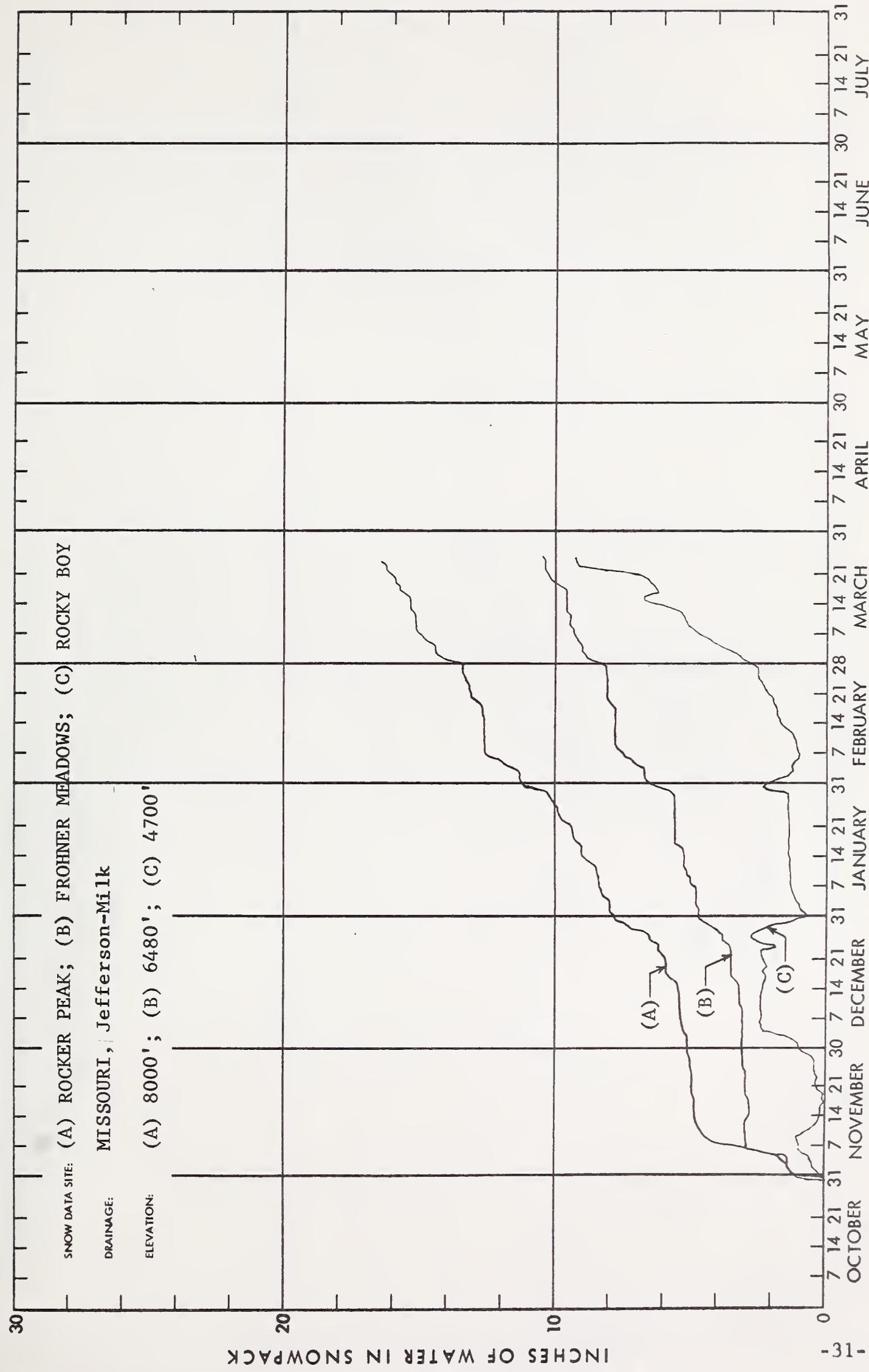










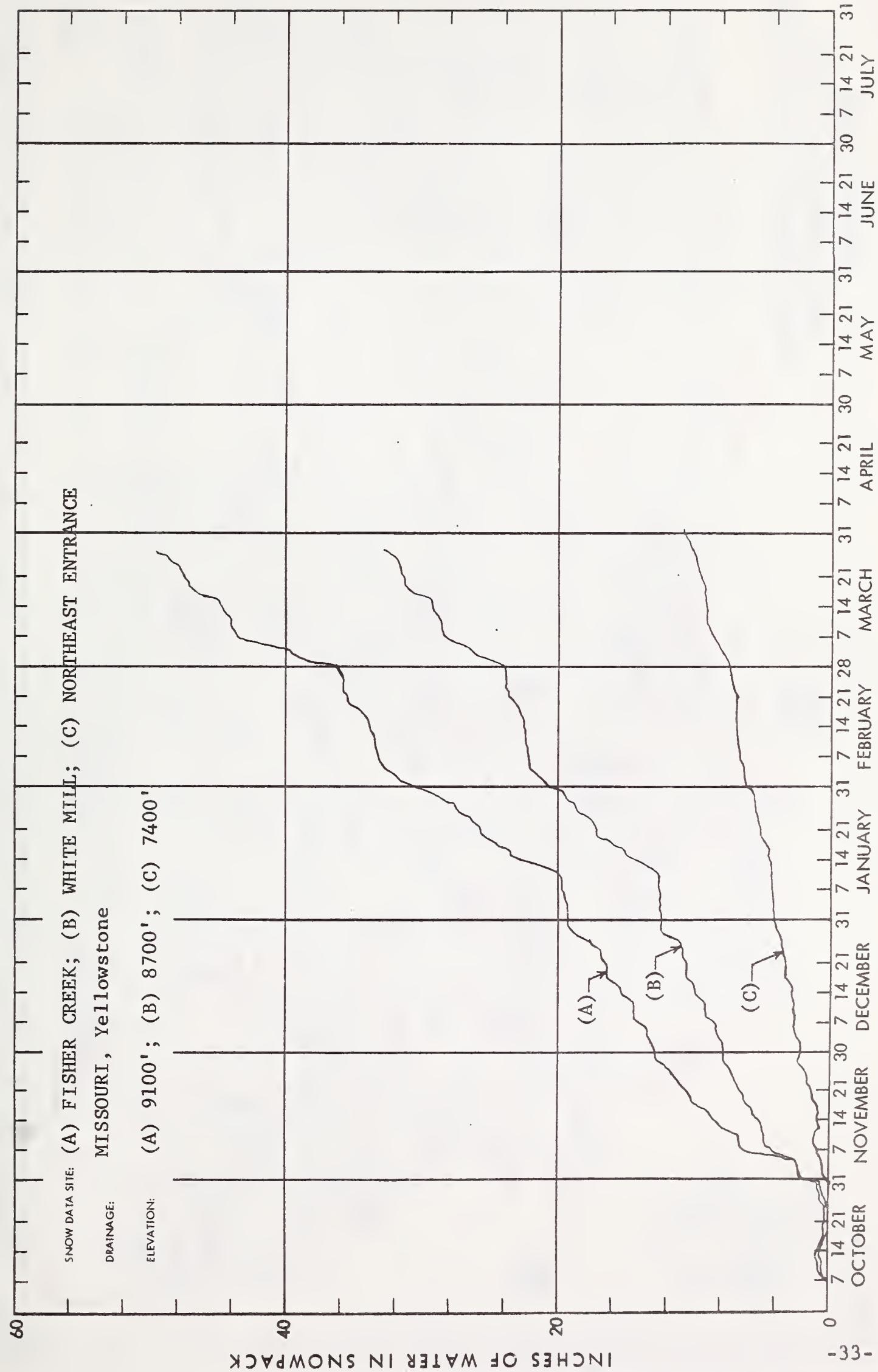


SNOW DATA SITE: (A) MOUNT LOCKHART; (B) WALDRON

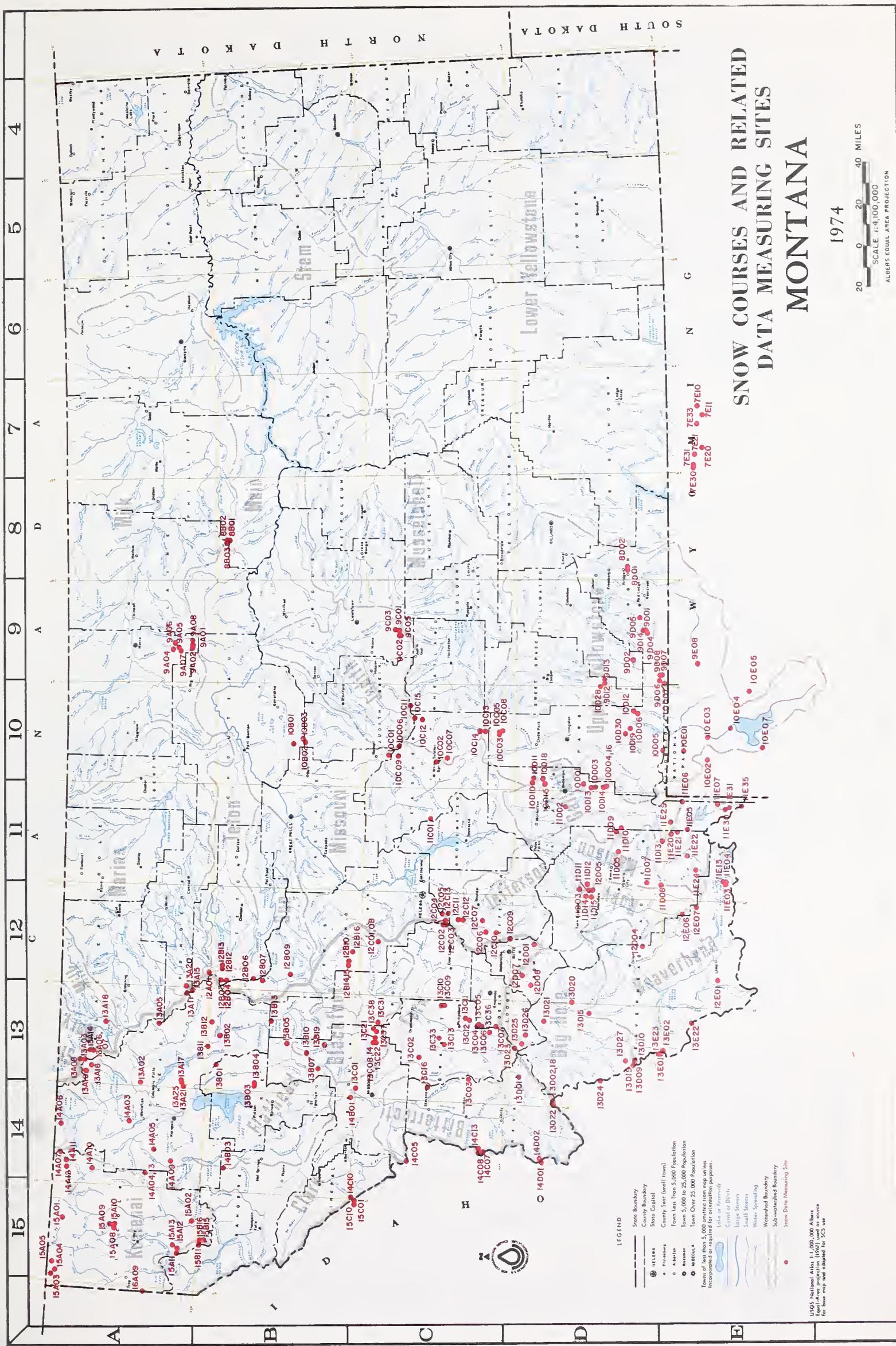
MISSOURI
DRAINAGE: Sun-Tetan-Marijas

ELEVATION: (A) 6400'; (B) 5600'









INDEX to MONTANA SNOW COURSES and SOIL MOISTURE STATIONS

SNOW COURSES										COLUMBIA RIVER BASIN									
Drainge Basin & Snow Course		Number		Elev. Sec.		Top. Bngs		Record Begun		Manufacturing Dates		Record Begun		Elev. Sec.		Top. Bngs		Record Begun	
KOOTENAI RIVER																			
Sail Eagle Peak	15A11	5700	6	27N	31W	1969	3,4,5,5,5,6	1											
Banfield Mountain	15A08	5600	4	32N	30W	1969	2,3,4,5,5,6	1											
Barre Creek	15B11	5500	36	26N	31W	1956	3,4,5,5,5	2											
Barre Mtn	15B16	4600	31	26N	30W	1966	3,4,5,5,5	2											
Barre Trail	15A10	3900	2	32S	30W	1969	2,3,4,5,5,6	1											
Brush Creek	16A04	5000	12	30N	26W	1937	3,4,5	1,2											
Brush Creek Timber	16A13	5000	12	30N	26W	1969	2,3,4,5,5,6	1,2											
Cedar Grove	15A13	4100	35	28N	31W	1969	2,3,4,5,5,6	1											
Davis Creek	15A06	5400	20	37N	31W	1969	2,3,4,5,5,6	1											
Garver Creek	15A05	4250	18	37N	32W	1937	3,4,5,5,6	1											
Graves Creek	14A11	4300	1	36N	25W	1937	3,4,5,5,6	1											
Hawkins Lake	15A03	6450	18	37N	33W	1969	2,3,4,5,5,6	1											
Hawkins Lake	15A09	3300	25	30N	25W	1969	3,4,5	1											
Heller Creek	15A09	6050	25	30N	25W	1969	2,3,4,5,5,6	1											
Low Soul	15A09	4800	31	33N	29W	1969	2,3,4,5,5,6	1											
Postman Creek	15A21	5100	5	27N	31W	1969	2,3,4,5,5,6	1											
Red Mountain	15A01	6050	4	36N	28W	1937	3,4,5,5,6	2											
Stahl Peak	14A12	6050	5	36N	25W	1969	3,4,5,5,6	1											
Sedee Divide	14A07	5450	20	37N	37W	1937	3,4,5,5,6	1											
FLATHEAD RIVER																			
Barsoo Peak	14A03	5150	11	24N	25W	1966	3,4,5	1,5											
Barsoo Peak	15A11	5900	31	28N	11W	1966	3,4,5	1,5											
Big Creek	15B03	6750	7	22N	18W	1941	3,4,5	6	1,5										
Big Creek	13A17	6400	30	28N	18W	1962	3,4,5	6	1,5										
Big Creek	13A02	5600	24	31N	19W	1937	1,2,3,4,5	6	1,2										
Dewey Mountain	13B04	5500	8	22N	18W	1962	3,4,5	6	1,5										
Foothill Creek	14A09	6100	12	35N	18W	1968	3,4,5	6	1,6										
Griffith Creek Divide	13B12	6100	30	26N	13W	1966	3,4,5	6	1,5										
Quinstig Lake	14A03	5700	35	32N	24W	1962	1,2,3,4,5,5,6	2											
Will Roasting Divide	14A03	5000	25	32N	24W	1962	1,2,3,4,5,5,6	2											
Will Roasting Divide	13B13	4530	18	21N	23W	1954	1,2,3,4,5	6	1,5										
Wolbrook	16A06	3890	14	37N	24W	1966	3,4	6	1,6										
Wolbrook	14A05	4100	34	30N	24W	1934	1,2,3,4,5	3	1,2										
Wolbrook	13A05	5250	34	30N	14W	1957	3,4,5	6	1,7										
Wolbrook	14A06	4000	29	35N	17W	1974	3,4,5	1,2	1,2										
Wolbrook	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	32	7N	5W	1968	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
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White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
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White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6840	25	28N	19W	1974	3,4,5	1,2	1,2										
White Mill	12C12	6500	10	4N	10E	1938	3,4,5	1,2	1,2										
White Mill	14A16	5000	29	35N	17W	1957	3,4,5	6	1,6										
White Mill	13A25	6																	

SOIL NOISEREDUCTION

COLUMBIA RIVER BASIN

8D02M	3700	35	65	23E	1973	Monthly
8D03M	3700	35	65	23E	1973	Monthly

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LEGEND

55, 6 refer to January 1, February 1, March 1, April 1, May 1, May 15, and June

PROBLEMS AND PROBLEMATICS IN THE STUDY OF THE POLYCHORDATE GROUP

agency working the below surveys as follows:

8, U. of M. School of Forestry
9, Department of Energy, Mines and Resources
Survey

10, Bureau of Sports Fisheries and Wildlife
Company ~~of America~~ ^{of America} Corporation

on Migratory
Service

11. Private Cooperator
12. Montana Conservation Districts

13. Montana Department of Fish and Game

Agencies and Organizations Cooperating in Montana Snow Surveys

GOVERNMENT AGENCIES

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Water Survey of Canada, Calgary, Department of the Environment
Water Resources Service, Department of Lands, Forests and Water Resources, British Columbia

Federal:

Department of the Army
Corps of Engineers
U.S. Department of Agriculture
Forest Service
Soil Conservation Service
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of the Interior
Bonneville Power Administration
Bureau of Indian Affairs
Bureau of Reclamation
Bureau of Sports Fisheries and Wildlife
Geological Survey
National Park Service

STATE

Montana Association of Conservation Districts
Montana Department of Fish and Game
Montana Department of Natural Resources and Conservation
Montana Water Resources Board
Montana State University - Agricultural Experiment Station
North Montana Branch Station - Agricultural Experiment Station
University of Montana - School of Forestry

PRIVATE

Montana Power Company

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.



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